REMARKS

As a preliminary matter, applicant requests acknowledgement of the references cited in an Information Disclosure Statement filed on May 22, 2002. A copy of the IDS is enclosed.

Claims 3, 6 and 8 stand rejected under § 103 on the basis of Ieki et al., and claims 1-8 stand rejected under § 103 on the basis of applicant's admitted prior art and Ieki et al. Applicant traverses these rejections because Ieki et al. do not disclose or suggest a high harmonic oscillator using a surface acoustic wave filter (SAW device), which adopts a quartz-crystal substrate, or amplifying components of an oscillator output signal in the manner of the present invention.

Ieki relates to a filter and a SAW device used in a converter that suppresses stress migration. The SAW device of Ieki prevents stress migration from occurring by forming an electrode using an aluminum film, which is crystallographically oriented in a constant direction on a piezo-electric substrate. In this case, a quartz-crystal is used for this piezo-electric substrate.

The circuit shown in Fig. 3 of Ieki that the examiner cites is used to evaluate the withstand power of a SAW device, and is not a high-frequency oscillator as used in the present invention. Since Ieki relates to a SAW device whose stress migration is suppressed, Ieki measures the life of a device using the evaluation circuit shown in Fig. 3.

The evaluation circuit shown in Fig. 3 inputs a signal obtained by amplifying the output of an oscillator 21 by a power amplifier 22, to the SAW device 1, which is contained in a thermostatic oven so that the SAW device can be under a high ambient temperature in order to increase the speed of deteriorating the SAW device 1. The output of a power meter 23 is fed back to the oscillator 21 through a computer 24, whereby the frequency of the oscillator 21 is controlled so that a signal applied to the SAW device 1 is regularly at the peak frequency of transmission response. The power meter 23 measures the output P(t) of the SAW device 1 (see col. 5, lines 59 through col. 6, line 8). Then, the life td of the SAW device 1 whose P(t) decreases as time elapses, as shown in Fig. 4, is calculated (see col. 6, lines 9 through 17).

The present invention relates to a high-frequency oscillator, whereas the circuit shown in Fig. 3 of Ieki is an evaluation circuit. The target of Ieki is completely different from that of the present invention. The objective and effect of Ieki are also completely different from those of the present invention.

The high-frequency oscillator of the present invention aims to prevent noise from occurring. The high-frequency oscillator is characterized in that in order to achieve this objective, (1) a SAW filter whose piezo-electric substrate is made of a quartz-crystal is used , and (2) the level of a higher harmonic component against the level of a fundamental frequency is increased by distorting the output signal of an oscillator. The SAW filter selects an arbitrary high harmonic component from the output of this oscillator.

Neither Ieki nor the admitted prior art cited in the specification of the present invention discloses item (2) above at all. Although Ieki discloses a SAW device using a quartz-crystal for a piezo-electric substrate, Ieki fails to disclose a high-harmonic oscillator using this SAW device (therefore, there is no concept of preventing noise from being caused by high frequency output), by using a SAW filter adopting a quartz-crystal substrate like the present invention. Withdrawal of these rejections is respectfully requested.

For the foregoing reasons, applicants believe that this case is in condition for allowance, which is respectfully requested. The examiner should call applicant's attorney if an interview would expedite prosecution.

Respectfully submitted,

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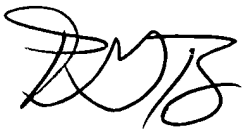
By 

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